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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,007	10/13/2005	Fedja Bobanovic	920602-99281	2701
23644 7590 11/30/2009 BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786				
EXAMINER NGUYEN, THONG Q				
ART UNIT 2872		PAPER NUMBER		
NOTIFICATION DATE 11/30/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patent-ch@btlaw.com

### Office Action Summary

**Application No.**

10/531,007

**Applicant(s)**

BOBANOVIC ET AL.

**Examiner**

Thong Nguyen

**Art Unit**

2872

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32-62 is/are pending in the application.
- 4a) Of the above claim(s) 35-47 and 50-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-34, 48 and 49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/13/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The present Office action is made in response to the amendment filed on 8/14/2009.
2. It is noted that in the amendment, applicant has made changes to the abstract, the specification, the drawings and the claims. Regarding to the claims, applicant has amended claims 32-34 and 48-49. there is not any claim being added into or canceled therefrom the application. The pending claims are claims 32-62 in which claims 32-34 and 48-49 are examined in this Office action and claims 35-47 and 50-62 have been withdrawn from further consideration as being directed to non-elected inventions.

### ***Drawings***

3. The two replacement sheets contained corrected figures 1-2 were received on 8/14/09. The two replacement sheets with corrected figures 1-2 are approved by the examiner. As a result of the changes to the drawings, the application now contain thirteen sheets of figures 3-5, 6A-C, 7, 8A-B, 9A-B and 10A-B as filed on 4/12/2005, and two replacement sheets contained figures 1-2 as filed on 8/14/09.
4. The objections to drawings as set forth in the previous Office action have been overcome by the amendments to the drawings and the specification as provided in the amendment of 8/14/09.

### ***Specification***

5. The abstract of the disclosure as submitted on 8/14/09 were received and approved.

6. The lengthy specification which was amended by the amendment of 8/14/09 has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

7. The objection to claims 32, 34, and 49 as set forth in the previous Office action have been overcome by the amendments to the claims as provided in the amendment of 8/14/09.

***Claim Rejections - 35 USC § 112***

8. Claim 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 34: on lines 2-8, the feature thereof "second shutter means...capture device" is indefinite. What errors which arise from light does applicant imply here? While it is clear that a receiving system can receive errors caused by phosphorescence, afterglow, stray reflections; however, it is unclear which errors are provided by "light". Applicant should note that claim must be analyzed to determine its metes and bounds so that it is clear from the claim language what subject matter the claim encompasses. In the present claim, it is unclear about the mete and/or bound of the feature 'errors which arise from light' claimed in the claim.

***Claim Rejections - 35 USC § 102***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
10. Claims 32 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo et al (of record).

Endo et al disclose a confocal microscope. The confocal microscope as described in paragraphs [0220]+ and shown in figs. 19+ comprises the following features: a) a means for mounting a specimen (40) which is able to move along an optical axis; b) a light source system (30, 32) for providing light to illuminate the specimen; c) a confocal scanning system (102, 42, 96) for directing light from the light source system to the specimen in one direction and for directing light reflected from the specimen to a detecting system in other direction. The scanning disk (102) is rotated to guide light emitted from the disk to scan repeatedly an area of interest of the specimen; d) a detecting system (44, 46) having a charged coupled device (46) which comprises a plurality of spatially distinct sensitive regions for receiving light reflected from the specimen after passed through the apertures of the scanning disk (102); and d) a control system (86, 60a-b, 78, 104, 106) having a host computer (86) and a controller (78) for controlling the operation of the charged coupled device (46), the scanning disk (102) on the basis of input signals provided by the photodetectors (60a, 60b), synchronizing signal generator (104), computer (86), ...so that the time the light from the specimen incidents on the charge coupled device is synchronized with

the scanning time of the scanning disk. See paragraphs [0226], [0248], for example. It is also noted that the signals from the charged coupled device is displayed on a monitor (58), see paragraphs [0221]-[0222].

***Claim Rejections - 35 USC § 103***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
12. Claims 33-34 and 49, as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al in view of Morita et al (of record).

The confocal microscope as provided by Endo et al does not explicitly disclose a shutter disposed on the downstream of the light source system (30, 32) for controlling the light from illumination the specimen. Regarding to the feature regarding to a shutter disposed upstream of the charged coupled device, such feature is inherently known because any charged coupled device comprises a shutter disposed therein. It is also noted that Endo et al do not disclose the operation of the shutter of the charged coupled device in relation to the operation of the shutter disposed downstream of the light source system. However, the use of two shutters wherein one is disposed on the downstream of a light source and the other is disposed upstream of a charged coupled device wherein the two shutters are connected to a control system so that their operations are related to each other is known to one skilled in the art as can be seen in the optical device provided by Morita et al. In particular, Morita et al disclose an optical device having an illumination system for providing light to illuminate an object and a

detecting system for receiving light reflected from the object. The illumination system comprises a shutter (17) in the form of an acousto-optic element, see paragraph [0052] and the detecting system comprises a shutter wherein both shutters are connected by the control system so that their operations are synchronously related to each other. See paragraph [0062]-[0063]. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the confocal microscope as provided by Endo et al by utilizing shutters in the illumination system and the detecting system as suggested by Monita et al for the purpose of controlling the operations of the shutters and for reducing errors to the images received by the detecting system.

### ***Response to Arguments***

13. Applicant's arguments filed on the amendment of 8/14/09, pages 12-13, have been fully considered but they are not persuasive for the following reasons.

a) Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

b) Applicant has argued that the prior art applied by the examiner in the rejection of the claims does not disclose the feature that the controller is programmed to function as a state machine. The examiner offers the following opinions: First, the present claims do not have any features/limitations which provide specific structure of the so-called "state machine"; and Second, any computer device as clearly to one skilled in the art

that a device is programmed with a set of instructions which are need to be executed in step-by-step or state-by-state for the purpose of providing signals to other components connected to the computer and for performing analysis based on signals from other components connected to the computer. In this aspect, the computer device as disclosed by Endo meets the feature recited in the present claims which fails to provide any specific features of the so-called "state machine".

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The citation of the Publication reference No. 2002/0097490 in the form PTO-1449 of 10/13/09 has been lined through because it was cited by the examiner which reference was listed in the form PTO-892 mailed to applicant on 5/28/09.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thong Nguyen/

Primary Examiner, Art Unit 2872